

The Florida Senate
BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Health Regulation Committee

BILL: SB 1296

INTRODUCER: Senator Bennett

SUBJECT: Beach Water Contamination

DATE: March 6, 2009 REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Munroe	Wilson	HR	Favorable
2.	_____	_____	EP	_____
3.	_____	_____	GA	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____

I. Summary:

The bill requires the Department of Health (DOH), when it issues a health advisory against swimming in beach waters due to bacterial contamination, to notify the appropriate local government and the local office of the Department of Environmental Protection (DEP). The DEP must investigate wastewater treatment facilities within 1 mile of the affected beach to determine if a facility experienced an incident that may have contributed to the contamination. Upon completion of its investigation, the DEP must provide written notification to the local government in which the affected beach is located of the results of its investigation.

The bill moves the definition of “beach waters” from s. 514.023, F.S., to s. 514.011, F.S., which provides definitions for chapter 514, F.S. The bill also makes minor technical changes to ss. 514.023 and 514.25(9), F.S.

This bill amends sections 514.011, 514.023, and 515.25, Florida Statutes.

II. Present Situation:

Wastewater Contaminants and Their Public Health Effects

Fecal coliform and *enterococci* are both enteric bacteria that normally inhabit the intestinal tract of humans and animals.¹ The presence of enteric bacteria is an indication of fecal pollution, which may come from storm water runoff, pets and wildlife, and human sewage. If they are

¹ See Florida Department of Health, Florida Healthy Beaches Program. at: <<http://esetappsdo.h.doh.state.fl.us/irm00beachwater/terms.htm>> (Last visited on March 6, 2009).

present in high concentrations in recreational waters and are ingested while swimming or enter the skin through a cut or sore, they may cause human disease, infections or rashes.²

Florida Healthy Beaches Program

Chapter 514, F.S., regulates public swimming and bathing facilities. Under s. 514.023, F.S., the DOH may adopt and enforce rules to protect the health, safety, and welfare of persons using the beach waters of the State of Florida. The Florida Healthy Beaches Program is located within the DOH.³ Beginning with a 1998 pilot program, 11 Florida coastal counties began conducting beach water sampling every 2 weeks and reporting the results on the DOH website and in local news media. In August 2000, the beach water sampling program was expanded to include the 34 Florida coastal counties.⁴

In August 2002, the coastal counties began collecting weekly samples. The coastal beach water samples collected by the county health departments are analyzed for *enterococci* and *fecal coliform* bacteria. If bacteria counts exceed standards established by rule through the DEP, county health departments issue health advisories or warnings when these conditions are confirmed.

Definition of Public Swimming Pool

Chapter 514, F.S., which relates to public swimming and bathing facilities, and ch. 515, F.S., which relates to residential swimming pools, both define the term “public swimming pool.” Section 514.011(2), F.S., defines “public swimming pool” or “public pool” to mean a watertight structure of concrete, masonry, or other approved materials which is located either indoors or outdoors, used for bathing or swimming by humans, and filled with a filtered and disinfected water supply, together with buildings, appurtenances, and equipment used in connection therewith. The definition also includes examples of the types of pools that are included in the definition. Section 515.25(9), F.S., defines “public swimming pool” to mean a swimming pool, as defined in s. 514.011(2), F.S., which is operated, with or without charge, for the use of the general public; however, the term does not include a swimming pool located on the grounds of a private residence. Section 514.011(2), F.S., defines “private pool” to mean a facility used only by an individual, family, or living unit members and their guests, which does not serve any type of cooperative housing or joint tenancy of five or more living units.

Wastewater Compliance Evaluation Section

The DEP regulates wastewater treatment facilities in accordance with ch. 403, F.S. Wastewater facilities that collect and treat sewage pose the greatest threat for bacterial contamination. These facilities, as part of their operating permit, are required to regularly monitor and report effluent quality to the DEP. Wastewater facilities that treat sewage are inspected by the DEP annually,

² *Id.*

³ Florida Healthy Beaches Program. Found at: <<http://esetappsdo.h.doh.state.fl.us/irm00beachwater/default.aspx>>(Last visited on March 6, 2009)

⁴ These counties include: Bay, Brevard, Broward, Charlotte, Citrus, Collier, Dixie, Duval, Escambia, Flagler, Franklin, Gulf, Hernando, Hillsborough, Indian River, Lee, Levy, Manatee, Martin, Miami-Dade, Monroe, Nassau, Okaloosa, Palm Beach, Pasco, Pinellas, St. Johns, St. Lucie, Santa Rosa, Sarasota, Taylor, Volusia, Wakulla, and Walton.

must report to the DEP any non-compliance, including any spills from their collection system, and provide a written report within 5 days indicating any corrective actions taken to correct the violation. Immediate response to non-compliance by the wastewater facility is essential, along with immediate notification to the appropriate state agencies. Facilities are able to provide this required notification by calling a 24-hour, toll-free hotline operated by the State Warning Point (SWP). When a spill directly affects surface waters or if it poses a threat to the public health, then the SWP and/or the DEP also notifies the DOH.

In cases where sewage treatment facilities are the source of bacterial contamination, it is most likely due to a non-compliance event of which the DEP is fully aware and is working towards resolution. Once properly resolved, the facility should no longer continue being a significant source of bacterial contamination. Other significant sources of bacteria which do not have nearly the amount of monitoring or oversight as the DEP has over wastewater facilities include storm water runoff, privately-owned septic tanks and marinas. According to the DEP, either individually or combined, these minimally regulated sources make up the greater threat to our beach waters.

In terms of beach water contamination, the DEP sets standards for both *fecal coliform* and *enterococci* bacteria levels to determine whether health advisories should be issued.⁵ *Fecal coliform* has long been Florida's preferred indicator organism in both fresh and saltwater. The measurement of *fecal coliform* levels is used by the DEP to determine water quality in fresh, brackish, and marine water environments. Under the DOH testing program, if a *fecal coliform* result is observed to exceed 399 colony forming units per 100 milliliters of beach water sampled and a resampling result also exceeds this value, then a health "Warning" would be issued for the sampling site.⁶

Based on recommendations by the United States Environmental Protection Agency (EPA), Florida's statewide testing program also includes testing for *enterococci*, which the EPA recommends states adopt as a saltwater quality indicator of water quality.⁷ According to studies conducted by the EPA, *enterococci* have a greater correlation with swimming-associated gastrointestinal illness in both marine and fresh waters than other bacterial indicator organisms, and are less likely to "die off" in saltwater. In Florida, if an *enterococci* result were observed to exceed 103 colony forming units per 100 milliliters of beach water sampled and a resampling result also exceeds this value, then an "Advisory" would be issued for the sampling site.

With the collection of weekly samples, the DEP program also calculates the geometric mean for *enterococci*. The geometric mean is a number calculated from five weeks of beach sample results, including any resampling that has taken place.⁸ As a result, it is an indication of average water quality conditions over that time period at that particular location. The EPA's increased illness risk estimates for bathers is based on the geometric mean exceeding 34 colony forming units per 100 milliliters of beach water sampled during this time frame.⁹

⁵ *Id.* at 2.

⁶ 100 milliliters is about 7 tablespoons of water.

⁷ *Id.* at 2.

⁸ *Id.*

⁹ *Id.*

III. Effect of Proposed Changes:

Section 1. Amends s. 514.011, F.S., to move the definition of “beach waters” from s. 514.023, relating to the sampling of beach waters by the DOH and the issuance of health advisories, to s. 514.011, F.S., which provides definitions for ch. 514, F.S.

Section 2. Amends s. 514.023, F.S., relating to the sampling of beach waters by the DOH and the issuance of health advisories, to require the DOH, when it issues a health advisory against swimming in beach waters due to bacterial contamination, to notify the appropriate local government and the local office of the DEP. The DEP must investigate wastewater treatment facilities within 1 mile of the affected beach to determine if a facility experienced an incident that may have contributed to the contamination. Upon completion of its investigation, the DEP must provide written notification to the local government in which the affected beach is located of the results of its investigation.

The section is also amended to make minor technical changes to s. 514.023(3), F.S., regarding a contingent appropriation of nonrecurring revenue for a 3-year study to determine the water quality at beaches located throughout Florida.

Section 3. Amends subsection (9) of s. 515.25, F.S., relating to definitions for ch. 515, F.S., to make minor technical changes to the definition of “public swimming pool.”

Section 4. Provides an effective date of July 1, 2009.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

The provisions of this bill have no impact on municipalities and the counties under the requirements of Article VII, Section 18 of the Florida Constitution.

B. Public Records/Open Meetings Issues:

The provisions of this bill have no impact on public records or open meetings issues under the requirements of Article I, Section 24(a) and (b) of the Florida Constitution.

C. Trust Funds Restrictions:

The provisions of this bill have no impact on the trust fund restrictions under the requirements of Article III, Subsection 19(f) of the Florida Constitution.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

The DOH reports that the bill has no fiscal impact on the department.

The DEP officials state that the agency's provision of information to relevant local governments as required by the bill can be accomplished at no measurable cost to the DEP.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Additional Information:**A. Committee Substitute – Statement of Substantial Changes:**

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. Amendments:

None.